

FY 2005 DoD Instrumentation and Research Program for HBCU/MI

Award Recipients

Institution	State	Principal Investigator	Proposal Title	Type Award	Selecting Agency
Adams State College	CO	Dr. Randall W. Emmons	Robotics Equipment	Instrumentation	ARO
Alabama A&M University	AL	Dr. Sergey S. Sarkisov	Two-Photon Processes in New Derivatives of Piperidone and Cyclohexanone	Research	AFOSR
Albany State University	GA	Dr. Louise V. Wrensford	Integration of NMR Spectroscopy for and Enhanced Undergraduate Science Curriculum at Albany State University	Instrumentation	ARO
Bowie State University	MD	Assoc. Professor Seonho Choi	Denial-of-Service Resistant Multicast Authentication Protocol with Prediction Hashing and One-way Key Chain	Research	AFOSR
California State University - Bakersfield	CA	Professor Robert A. Horton, Jr.	Scanning Electron Microscopy with X-Ray Microanalysis (SEM-EDS) - Modern Analytical Instrument for Enhancing Recruitment, Retention, and Academic Achievement of Minority Students in the Natural Sciences	Instrumentation	ARO
California State University - Long Beach	CA	Professor Tulin E. Mangir	Assessing the Integrity and Integration Issues for Nano Sensors/Nanostructures - Equipment, Research, and Outreach Proposal	Research	ARO
California State University - Los Angeles	CA	Dr. Maj Dean Mirmirani	Modeling, Control, and Simulation of Airbreathing Hypersonic Vehicles	Research	AFOSR
Chicago State University	IL	Dr. Robert C. Richter	Microwave Laboratory Systems to Enhance Research Opportunities and Science Education	Instrumentation	AFOSR
CUNY - Medgar Evers College	NY	Dr. Kwesi Amoa	A 60-MHz Nuclear Magnetic Resonance Spectrometer for Undergraduate Instruction and Research	Instrumentation	AFOSR
Delaware State University	DE	Dr. Essaid Zerrad	Ionization of Ionic and Atomic Targets by Electron Impact	Research	AFOSR
Fisk University	TN	Dr. Richard R. Mu	Tailoring Optoelectronic Properties of Metal Oxide Nanostructure for Device Applications	Research	ARO
Fisk University	TN	Assoc. Professor Weijie Lu	Development of Macroscopic-Scale Aligned Metal-free Carbon Nanotubes	Research	AFOSR
Florida A&M University	FL	Dr. Kalayu G. Belay	Acquisition of a Modern Raman Microscope for the Characterization of Advanced Materials	Instrumentation	ARO
Florida International University	FL	Dr. Cesar Levy	Investigation of Carbon Nanotubes and Shape Memory Alloy Treatment for Vibration Control	Research	ARO
Hampton University	VA	Professor Michael P. McCormick	Instrumentation for Enhancing Education and Research in Laser Remote Sensing	Instrumentation	ARO
New Jersey City University	NJ	Dr. Kenneth Yamaguchi	Strengthening the Skills of Chemistry Students via Biochemical and Multisynthetic Project-based Labs.	Instrumentation	AFOSR
New Mexico State University	NM	Asst. Professor Russell P. Jedlicka	Wireless and Optical Wave Laboratory Development	Instrumentation	ARO
Norfolk State University	VA	Dr. Rakhim R. Rakhimov	Deactivation of Toxic Materials with Quinones	Research	ARO
North Carolina A&T State University	NC	Dr. Margaret I. Kanipes	Development of a Genotyping Scheme for Identifying Strains of <i>Campylobacter jejuni</i>	Research	ARO
North Carolina A&T State University	NC	Dr. Maranda E. McBride	Bone Conduction Threshold and Speech Intelligibility Studies for Use in the Development of Military Radio Communication Devices	Research	ARO
North Carolina Central University	NC	Dr. Alade O. Tokuta	Instrumentation for Graphics and Geometric Algorithms for Dynamic Models	Instrumentation	ARO
North Carolina Central University	NC	Professor Branislav Vlahovic	Formation and Characterization of Quantum Dots and Multi-junction Thin Films Designed for High Efficiency Photovoltaic Cells	Research	ARO
Polytechnic University of Puerto Rico	PR	Dr. Alfredo Cruz	Window to the Caribbean: Focus in Complex Multi-dimensional Distributed Scenarios	Instrumentation	AFOSR
Prairie View A&M University	TX	Dr. Jian-Ao Lian	Nonseparable Multivariate Multiwavelets and their Applications to Signal and Image Processing	Research	ARO
Prairie View A&M University	TX	Dr. Tian-Sen Huang	Further Development of PVAMU Space Science Program	Research	AFOSR
Sisseton Wahpeton College	SD	Mr. Scott A. Morgan	SWC Bridges the Digital Divide to Improve STEM Instruction	Instrumentation	ARO
The University of Texas - San Antonio	TX	Professor Eugene B. John	Energy Efficient RF CMOS Front-End Circuits for Wireless Communications	Research	ARO
The University of Texas - San Antonio	TX	Dr. Qi Tian	Self-Supervised Learning and Information Fusion for Multimodel Systems	Research	ARO
The University of Texas - San Antonio	TX	Dr. Emilio Mendoza	Purchase of Scanning Electron Microscope for College of Engineering	Instrumentation	AFOSR
Universidad Del Turabo - Ana G. Mendez University System	PR	Dr. Jose Duconge	Strengthening a Modern Physics Laboratory for Science and Engineering at Universidad Del Turabo	Instrumentation	ARO
University of California - Irvine	CA	Asst. Professor Ahmed Ettawil	Wireless Multi Input Multi Output Research and Instrumentation	Instrumentation	ARO

FY 2005 DoD Instrumentation and Research Program for HBCU/MI

Award Recipients

University of California - Riverside	CA	Professor Junian Wang	Determination of Interfacial Properties of Tungsten Heavy Alloys Using Laser-induced Dynamic Spallation of Thin Film Interfaces	Research	ARO
University of Hawaii	HI	Assoc. Professor Ralf I. Kaiser	Crossed Molecular Beams Investigations on the Dynamics and Energetics of Elementary Boron Reactions with Unsaturated Hydrocarbons	Research	AFOSR
University of New Mexico	NM	Asst. Professor Plamen Atanassov	Thermal Analysis and Particle Size Characterization Laboratory	Instrumentation	AFOSR
University of New Mexico	NM	Dr. James Thomas	Surface Plasmons for Novel Optoelectronic Components and Biomedical Microscopy	Research	AFOSR
Virginia State University	VA	Professor Carey E. Stronach	Nanocrystalline Iron-Cobalt Alloys for High-Saturation Inductance	Research	AFOSR
Winston-Salem State University	NC	Dr. Abdul K. Mohammad	Chemistry Instrumentation Improvement at Winston-Salem State University	Instrumentation	AFOSR